

REMARKS

In response to the Office Action mailed November 5, 2007, Applicant respectfully requests reconsideration of the Application in view of the foregoing Amendments and the following Remarks. The claims as now presented are believed to be in allowable condition.

Claims 3 and 15 have been canceled, and claims 4 and 16 have been amended. Claims 1, 2, 4-14, 16-27 remain in this application, of which claims 1, 13, and 25 are independent claims.

Rejection of Claims 4 and 16 under 35 U.S.C. §112

Claims 4 and 16 are rejected under 35 U.S.C. §112, second paragraph, for being dependent on canceled claims 3 and 15, respectively. Claims 4 and 16 have been amended to depend from claims 1 and 13, respectively.

Rejection of Claims 1, 11, 13, 23, and 25 under 35 U.S.C. §103(a)

Claims 1, 11, 13, 23, and 25 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication No. US 2004/0161145 to Embler (hereafter referred to as “Embler”) in view of U.S. Patent No. 5,668,932 to Laney (hereafter referred to as “Laney”). Applicant respectfully traverses this rejection.

In giving an obviousness rejection, the Examiner bears the initial burden of factually supporting a prima facie conclusion of obviousness. (See, MPEP, §2142). To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be *some suggestion or motivation*, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, *the prior art references* must teach or suggest *all the claim limitations*. (See, MPEP, §2142.) (Emphasis added.)

The rejection of claims 1, 13, and 25 under 35 U.S.C. §103(a) as being unpatentable over Embler in view of Laney is not appropriate because *inter alia* there is no motivation or suggestion in these references to combine or modify these references to the present invention.

In particular, the Examiner fails to consider the teachings of Laney in its entirety, and especially teachings in Laney that would teach away from being combined with Embler to result in the limitations of claims 1, 13, and 25.

The Examiner is respectfully reminded of the MPEP, §2141.03(VI) which states “PRIOR ART MUST BE CONSIDERED IN ITS ENTIRETY, INCLUDING DISCLOSURES THAT TEACH AWAY FROM THE CLAIMS.”

Claims 1, 13, and 25 recite that the virtually filtered luminance is determined from a first processing of the region of pixel data and without using other pixel data for a pixel location within the region, and that the reference luminance is determined for the pixel location from a second processing of the same region of pixel data and without using other pixel data.

However, Figure 13 of Laney teaches using a cell from a previous image frame (see step 116 in the flow-chart of Figure 13 of Laney) for determining whether a cell of a current image frame should be designated a “skip cell” during image data compression. Thus, Laney uses other pixel data (i.e. of the previous image frame) from the cell pixels of the current image frame.

The Examiner recites Figures 2-4 and col. 1, line 31 to col. 2, line 24 of Laney. However, note that Figures 2-4 and col. 1, line 31 to col. 2, line 24 are for just describing the Prior Art to Laney. Thus, Laney views such Prior Art teachings as being disadvantageous and deficient by stating that the object of Laney is to improve upon such a prior art pixel data compression technique by using cells of a previous image frame when compressing pixel data of

a current image frame. Thus, Laney touts using other pixel data aside from just the pixels of a cell of a current image frame by also using a cell of a previous image frame.

In addition, in FIG. 3 of Embler, the pattern correlator 44 determines neighborhood sample patterns using reference patterns as stored in an additional reference pattern storage unit 46. In contrast, the interpolator 34 of Embler determines interpolated color values from the pixel data from the image source 33. The reference patterns as stored in the data storage unit 46 is separate pixel data that is different from the pixel data of the image source 33.

Embler touts reducing aliasing by using an additional reference pattern storage unit 46 as stated at paragraph [0032] of Embler:

....The procedure is intended to improve perceptual quality by driving the overall center color toward a more neutral tone, thus minimizing the perception of chromatic ***aliasing*** artifacts (color fringes) near large luminance gradients. (Emphasis added.)

Thus, Embler trades off using the additional reference pattern storage unit 46 for minimizing aliasing by using the additional reference data that indicates a trend (i.e., luminance gradients in images). If Embler were to not include such additional reference data as determined during an initial setup operation, Embler may not achieve reduced aliasing.

The Examiner is respectfully directed to the MPEP at §2143 which states:

“THE PROPOSED MODIFICATION (OF THE PRIOR ART REFERENCE) CANNOT RENDER THE PRIOR ART UNSATISFACTORY FOR ITS INTENDED PURPOSE.”

“THE PROPOSED MODIFICATION (OF THE PRIOR ART REFERENCE) CANNOT CHANGE THE PRINCIPLE OF OPERATION OF A REFERENCE.”

Accordingly, a prima facie conclusion of obviousness of claims 1, 13, and 25 cannot be established because (1) Laney teaches away from determining the virtually filtered and

references luminances with just the region of pixel data from the image sensor without using other pixel data by touting use of pixel cells from a previous image frame when compressing image data for a current image frame, and because (2) modification of Embler to determining the virtually filtered and references luminances with just the region of pixel data from the image sensor without using other pixel data would render Embler unsatisfactory for its intended purpose.

Thus, the rejection of claims 1, 13, and 25 over Embler in view of Laney under 35 U.S.C. §103(a) should be withdrawn.

Claim 11, which depends from and further limits claim 1, is allowable for at least the same reasons that claim 1 is allowable as stated above.

Claim 23, which depends from and further limits claim 13, is allowable for at least the same reasons that claim 13 is allowable as stated above.

**Rejection of Claims 2, 4, 5, 7, 9, 10, 12, 14, 16, 17,
19, 21, 22, 24, 26, and 27 under 35 U.S.C. §103(a)**

Claims 2, 4, 5, 7, 9, 10, and 12, which depend from and further limit claim 1, are allowable for at least the same reasons that claim 1 is allowable as stated above.

Claims 14, 16, 17, 19, 21, 22, and 24, which depend from and further limit claim 13, are allowable for at least the same reasons that claim 13 is allowable as stated above.

Claims 26 and 27, which depend from and further limit claim 25, are allowable for at least the same reasons that claim 25 is allowable as stated above.

Allowable Subject Matter

Claims 6, 8, 18, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 6 and 8, which depend from and further limit claim 1, are allowable for at least the same reasons that claim 1 is allowable as stated above.

Claims 18 and 20, which depend from and further limit claim 13, are allowable for at least the same reasons that claim 13 is allowable as stated above.

Conclusions

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. Please feel free to contact the undersigned should any questions arise with respect to this case that may be addressed by telephone.

If the Examiner still deems the claims to be unpatentable, the Examiner is respectfully requested to mail the Advisory Action well before the 3-month dead-line of February 5, 2008, such that a timely Appeal can be filed before that dead-line.

Respectfully submitted,
for the Applicant(s)

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CERTIFICATE OF MAILING

The undersigned hereby certifies that the foregoing AMENDMENT AND RESPONSE is being deposited in the United States Postal Service, as first class mail, postage prepaid, in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 4th day of January, 2008.

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